

and are not meant as limitations. In particular, although the method of the present invention has been described by examples, the steps of the method may be performed in a different order from that illustrated or simultaneously. Those skilled in the art will recognize that these and other variations are possible within the spirit and scope of the invention as defined in the following claims and their equivalents.

## CLAIMS

What is claimed is:

1. A method for automated testing of a graphical user interface (GUI) of a program, said method comprising:
  - creating a test file comprising a plurality of test steps in a text format; and
  - executing a test harness with said test file as input to said test harness, said test harness configured to execute one of a plurality of automated tests in response to one of a plurality of test steps, each automated test configured to test a corresponding user interface element of said program through a GUI map, said GUI map configured to define a logical name for each user interface element of said program.
2. The method for automated testing of a GUI of a program according to claim 1, wherein each test step comprises an object, an action, and an identification reference.

claim 2, wherein each test step further comprises an optional field value.

4. The method for automated testing of a GUI of a program according to claim 3, wherein each test step further comprises an error recovery value.

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5. The method for automated testing of a GUI of a program according to claim 1, further comprising:

generating said GUI map of said program by extracting a logical name, a physical name, an identification, and an ordinal value for each user interface element of said program.

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6. The method for automated testing of a GUI of a program according to claim 1, further comprising:

generating said GUI map of said program from one of a prototype of said program, a design document of said program and an earlier version of said program.

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7. The method for automated testing of a GUI of a program according to claim 1, wherein:

each automated test is further configured to retrieve and to execute at least one of a plurality of associated reusable functions in response to said one of said plurality of test

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steps.

8. The method for automated testing of a GUI of a program according to claim 1, further comprising:

5                    outputting results of the execution of said plurality of automated tests in response to said test file.

9. A system for automated testing of a graphical user interface (GUI) of an application, said system comprising:

10                   at least one processor;

                    a memory coupled to said at least one processor;

                    a test harness residing in said memory and executed by said at least one processor, wherein said test harness is configured to execute one of a plurality of automated tests in response to one of a plurality of test steps of a data file, each automated test  
15                   configured to test a corresponding user interface element of said application through a GUI map, said GUI map configured to define a logical name for each user interface element of said application.

10                   10. The system for automated testing of a GUI of an application according to claim 9, wherein each test step comprises an object, an action, and an identification reference.

11. The system for automated testing of a GUI of an application according to claim 10, wherein each test step further comprises an optional field value.

12. The system for automated testing of a GUI of an application according to  
5 claim 11, wherein each test step further comprises an error recovery value.

13. The system for automated testing of a GUI of an application according to claim 9, wherein said GUI map of said application is generated with a GUI analyzer configured to extract a logical name, a physical name, an identification and an ordinal value  
10 for each user interface element of said application.

14. The system for automated testing of a GUI of an application according to claim 9, wherein said GUI map of said application is generated from one of a prototype of said application, a design document of said application, and an earlier version of said  
15 application.

15. The system for automated testing of a GUI of an application according to claim 9, wherein each automated test is further configured to retrieve and to execute at least one of a plurality of associated reusable functions in response to said one of said plurality of  
20 test steps.

16. The system for automated testing of a GUI of an application according to claim 9, wherein said test harness is further configured to generate an output file configured to contain results of said execution of said plurality of automated tests in response to said test file.

5 17. A computer readable storage medium on which is embedded one or more computer programs, said one or more computer programs implementing a method for automated testing of a graphical user interface (GUI) of an application, said one or more computer programs comprising a set of instructions for:

creating a test file a plurality of test steps in a text format; and

10 executing a test harness with said test file as input to said test harness, said test harness configured to execute one of a plurality of automated tests in response to one of a plurality of test steps, each automated test configured to test a corresponding user interface element of said program through a GUI map, said GUI map configured to define a logical name for each user interface element of said program.

15 18. The computer readable storage medium in according to claim 17, said one or more computer programs further comprising a set of instructions for:

generating said GUI map of said program by extracting a logical name, a physical name, an identification, and an ordinal value for each physical element of said  
20 program.

